# **Documentation**

# **Essentials**

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This file is meant to describe the main features included in the asset.

All the code is commented with XML documentation so this file does not go in deep in every class implementation and neither how to use them.

If you want to see examples, know what each method does, most of the class functionality and how to use most of the asset's features, I recommend you to look into the "Examples" folder (and read the comments inside the "Essentials/Scripts" folder).

## **Essentials' Settings and Modifications**

This window can be found under the "Window/Essentials/Settings" menu. In there you can apply recommended modifications.

Additionally, you can add custom modification simply by programming them in a class that inherits from the abstract class "Modification".

## **Debug Essentials**

Using "DebugEssentials" you can easily debug IEnumerables (lists, arrays, ...) using the method "DebugEssentials.LogEnumerable(...)". Example: DebugEssentials.LogEnumerable(Array).

In addition, it implements all the functionality from the Unity Engine's "Debug" class.

You can see an example of its use in the scene "DebugEssentialsExample" which uses the code "DebugEssentialsExample.cs".

# **Pool System**

The Pool class allow you to easily improve the performance of your game avoiding the constant instantiation and destruction of objects by automatically enabling and disabling them with a limited number of instances.

You can see an example of its use in the scenes and scripts inside the "Essentials/Examples/Pool" folder.

## Simple Animations

The SimpleAnimation class in conjunction with the SimpleAnimationsManager allows you to easily animate GameObject's components without having to deal with the extensive world of Unity's animations.

You can see an example of how an animation of a GameObject's transform could work in the scene "TransformAnimationExample" which uses the code "TransformAnimationExample.cs" and in the scene "RectTransformAnimationExample" which uses the code "RectTransformAnimationExample.cs". These examples use the class "TransformAnimation" and "RectTransformAnimation", which can be taken as an example to create animations of any component following the same patterns shown in it.

Other examples can be found in the same folder and <u>a video hosted on YouTube</u> exist as a demonstration of the feature.

#### Random Essentials

The RandomEssentials class allows you to easily work with randomness. It inherits the "System.Random" class, so it contains the same functionality plus some methods that are easier to understand than the original ones and some more that add new functionalities.

You can see an example of its use in the scene "RandomEssentialsExample" which uses the code inside the file "RandomEssentialsExample.cs".

#### **Extensions**

Multiple class extensions have been added to the asset to add some commonly-needed functionality in video games into some already implemented classes.

Some of the extended classes are:

- Camera
- Component
- Debug
- Float
- GameObject

- ICollection
- IEnumerable
- Int
- LayerMask
- Mathf
- Rect
- RectTransform
- SerializedProperty
- String
- Transform
- Vector
- VectorInt

#### Flow Control

C# classes have been added to control the flow during the execution of the project. This classes are:

- DoN (and DoOnce): Allows the call of a function N (or one) time even though they are called more times.
- Sequence (and FlipFlop): Executes one of the linked functions every time it is called rotating between them in sequence or randomly.

You can see examples about how to use them in the folder "Essentials/Examples/FlowControl".

A <u>video hosted on YouTube</u> exist as a demonstration of the feature:

#### Presets tools

3 tools have been added to increase the functionality of the presets:

- A tool to know if all Game Objects of the open scene match a preset (if they
  contain the component the preset is meant to set). It can be activated from the
  context menu of a preset.
- 2. A tool to make all Assets match the presets contained in the same folder. It can be activated using the Essentials Settings window.
- 3. A tool to check if all Game Objects in the open scene match the default presets. It can be activated through the GameObject menu in the Hierarchy or the menu items at the top of the engine.

A <u>video hosted on YouTube</u> exist as a demonstration of the feature:

# **Other Features**

#### **Shortcuts**

- Save Scene and Project (Ctrl + Shift + Alt + S)
- Save project (Ctrl + Alt + S)
- Clear Console (Ctrl + SPACE)

#### Menu Items

- File/Save Scene and Project